BioProTT™ Ultrasonic Flow Measurement System

FOR INDUSTRIAL & LABORATORY APPLICATIONS

PSG BIOTECH

PSG a DOVER company

CARING FOR EVERY DROP

PSG BIOTECH

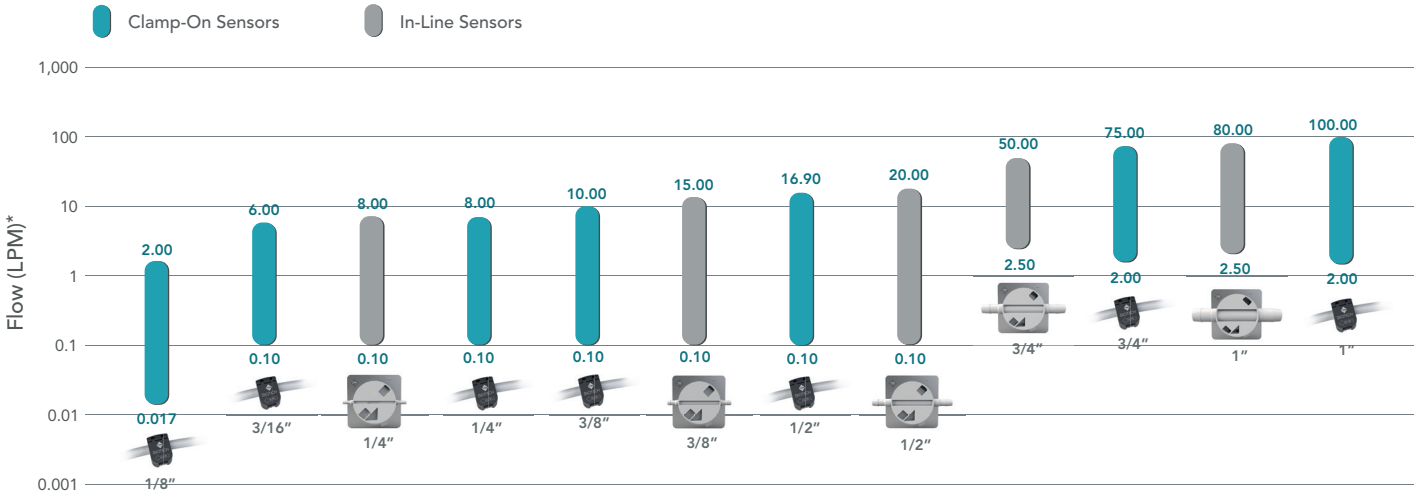
Who We Are

Caring for every drop with best-in-class flow meters for critical biopharma applications

At PSG® Biotech, we share your vision for innovation and transforming lives.

Our comprehensive portfolio of specialty flow control and measurement solutions includes pumps and flow meters that safely transfer and precisely meter the most delicate of biologics, medicines and therapeutics, all while increasing yield, throughput and speed to market.

With the BioProTT™ range, we offer easy-to-use flow sensors and transmitters based on the ultrasonic transit time technology. They provide quick and simple solutions for flow measurement and, depending on the application, are suitable as a clamp-on solution or In-line system for both multiple or single use.



* The minimal and maximal flow range is limited by the tube material and inner diameter. This may lead to higher or lower possible Qmin and Qmax and shall be examined on a case-by-case bases by test field.

Ultrasonic **Clamp-On** Sensor System

Reliable and independent flow measurement according to strict hygienic requirements for laboratory and industrial applications

The BioProTT™ Clamp-On System consists – depending on the variant – of a flow transmitter and one, or more, corresponding flow sensors.

The measurement function is based on the ultrasonic transit time difference method and works non-invasively, meaning there is no direct contact with the medium – making it particularly suitable for processes with strict hygienic requirements.

BioProTT™ FlowTrack SL

For the independent and reliable monitoring of flow rates on a laboratory scale.

- Compact plug & play transmitter in bench top design
- Monitoring of flow values in real time through an integrated display
- Digital and analog interfaces

BioProTT™ Clamp-On SL

For a reliable monitoring of the volumetric flow rates within laboratory and/or industrial applications.

- Easy to install on flexible tubing systems and available in 16 sensor sizes
- Customer-specific calibration in regard to tube, temperature and flow range
- No additional shear stress on cells through the non-invasive flow measurement method
- Economical — multi-use sensors last for years

BioProTT™ FlowMCP Series

For multiple and simultaneous flow measurement within automated bioprocessing systems with a focus on single-use applications.

- Flow measurement plattform in compact space saving design with DIN rail mounting
- Seamless integration into existing systems
- Simultaneous flow measurement of up to four flow channels with only one device

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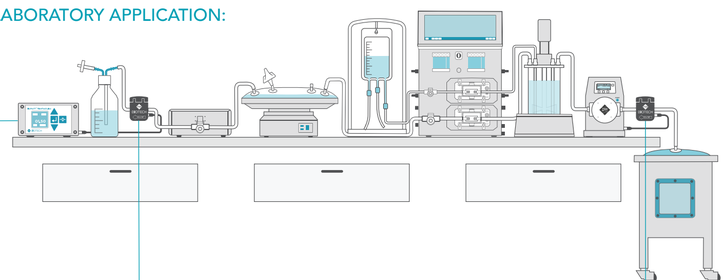
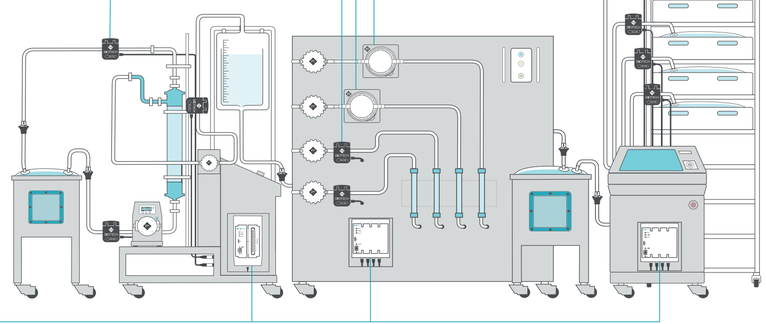
In critical biopharma applications such as chromatography, filtration, buffer preparation or filling processes, a reliable flow measurement is an important factor for a successful process. PSG Biotech offers ultrasound-based products to measure, monitor and control flow rate critical processes. Depending on the setup and process requirements you can choose between two general types of ultrasound-based flow measurement solutions for lab or industrial applications.

LABORATORY APPLICATION:



INDUSTRIAL APPLICATION:



Ultrasonic **In-Line** Sensor System

Smart and easy flow measurement integration for upstream and downstream processes within automated single-use applications

The BioProTT™ FlowSU System is an innovative flow measurement solution for single-use biopharma applications and consists of a multi-use transmitter and ultrasonic single-use flow sensors.

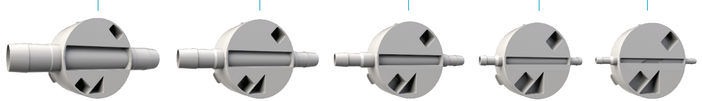
The first-of-its-kind sensor eliminates the need for individual calibration. As in-line system, it is directly integrated into the tubing system and consequently aimed at single-use applications.

BioProTT™ FlowSU System and Sensors

To simplify flow measurement processes in biopharma single-use applications.

- Pressure resistant up to 5.1 bar (74psi)
- 2% accuracy without individual calibration due to standardization
- Option to further improve accuracy with an on-site adjustment feature
- Full compatibility of all five sensor sizes (1/4'', 3/8'', 1/2'', 3/4'', 1'') with one multi-use transmitter: size is automatically recognized upon connection
- Toolless attachment of single-use sensor with special locking technology
- USP class VI material (polycarbonate) and gamma-stable up to 50 kGy
- Integrated bubble detection with adjustable air and bubble sensitivity
- Straight flow path for cell and media integrity
- Manufactured in ISO 13485 environment and packaged under ISO 7 conditions
- Standard hose barb connections
- Selectable flow averaging rate
- Integrated web interface for configuration

FlowSU System
Multi-Use Transmitter



FlowSU 1″ Single-Use Sensor | FlowSU 3/4″ Single-Use Sensor | FlowSU 1/2″ Single-Use Sensor | FlowSU 3/8″ Single-Use Sensor | FlowSU 1/4″ Single-Use Sensor

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Where Innovation Flows

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